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Promoting Growth in Sri Lanka

Lessons from East Asia

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Why — despite solid progress in human development and in the reduction of consumption poverty — has Sri Lanka's per capita income fallen far behind the dynamic East Asian economies? Sri Lanka's weaker growth performance was the result of several factors, including Sri Lanka's lower investment and (especially) domestic savings rates, its lower average productivity of investment (return on capital), its weak agricultural performance, and its poor export growth.

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Summary findings

Sri Lanka's weak economic performance, although compounded by the civil war and budgetary imbalance, largely reflects:

- A stop-and-go pattern of policy reform, because of political constraints — even though the results of reform were generally positive.
- Weak economic management, resulting in high inflation and a high fiscal and balance of payments deficit.
- Poor management of public spending.
- Mixed performance in exchange-rate management, with periods of substantial overvaluation.
- Financial policies that (despite recent improvements) hamper efficient financial intermediation.
- Prolonged trade protection, followed by selective trade liberalization.
- Continued distortion in agricultural policies.
- Inflexible labor markets and, despite Sri Lanka's outstanding track record on human development, problems with the quality of the labor force.

To address a substantially unfinished policy agenda, Sri Lanka needs to:

- Intensify efforts to peacefully resolve civil conflict.
- Squarely address its macroeconomic imbalances: (1) sharply reduce the fiscal deficit; (2) cut back on public spending (including defense spending, with peace) and redefine spending priorities; (3) improve cost recovery for public services; and (4) continue improving the management of the exchange rate.
- In trade policy, eliminate most quantitative restrictions, further reduce tariff protection, simplify the tariff structure, and, possibly, reform customs (to reduce leakage and abuse).
- Rationalize employment, exit, and bankruptcy regulations and procedures.
- Improve communications between government and the private sector.
- Make the financial sector more competitive by legislating banking reform, giving state-owned banks more autonomy and putting private commercial banks on an equal footing with the two state banks, with the ultimate goal of privatizing the state banks.
- Strengthen the supervision of banking.
- Privatize insurance and pension funds to strengthen the capital market.
- In the agriculture sector: (1) privatize the estate plantations, perhaps through long-term management contracts and the gradual sale of shares in assets, (2) reduce trade protection (especially on rice, wheat, potatoes, chilies, and onions), (3) implement land reform, (4) strengthen agricultural support (for example, irrigation, research and extension, and rural infrastructure), and (5) possibly support rural financing institutions.
- End government controls on hiring, firing, and wage setting, and rationalize (depoliticize) civil service employment decisions.
- Make the changes in education needed to improve the quality of the labor force (for example, improve teacher training, courses in science and English as a second language courses, and skills training).

This paper — a product of the Office of the Director, South Asia Country Department I — is part of a larger effort in the region to help identify policies for supporting higher growth in Sri Lanka. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ann Bhalla, room D10-071, extension 82168 (34 pages). June 1995.

PROMOTING ECONOMIC GROWTH IN SRI LANKA--LESSONS FROM EAST ASIA

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SUMMARY

Sri Lanka has made very impressive progress since independence in reducing the incidence of poverty. This is reflected in outstanding human development indicators as well as when poverty is measured in consumption terms. Despite this progress, Sri Lanka remains a poor country with substantial poverty. Although Sri Lanka's per capita growth rate of 2.5% per annum over the past thirty years or so compares favorably with most of the developing world, it falls much short of the growth rate achieved by the high-performing East Asian countries. Thus, in 1960 Sri Lanka's per capita income in nominal dollars was 276% higher than in Indonesia, 46% higher than in Thailand, about the same as in South Korea and about 50% lower than in Malaysia. Some 30 years later, Sri Lanka's per capita income is now less than a 12th of that in Korea, only a fifth of that in Malaysia, less than a third of Thailand and 24% below that in Indonesia. A stronger growth performance along the lines of the high-performing East Asian economies would have allowed much deeper reduction in Sri Lanka's poverty.

What factors explain why, despite solid human development, Sri Lanka's per capita income has fallen far behind the dynamic East Asian economies? Using an aggregative time series growth model as well as a more disaggregated and somewhat heuristic approach the paper shows that Sri Lanka's weaker growth performance can be explained by differences in the underlying policy framework. Like the East Asian economies, Sri Lanka put a lot of emphasis on human development and equitable distribution of income. These policies did pay off handsomely in terms of strong human development and reduction in consumption poverty. But Sri Lanka was unable to fully exploit its good human capital base to increase its income as rapidly as the high-performing East Asian economies for a number of reasons. First, Sri Lanka's investment and saving rates were lower than in the dynamic East Asian economies; in particular the domestic saving rate was very low. Thus, between 1960-92 Sri Lanka invested at an average rate of 20% of GDP while the investment rates were 27% in Korea, 25% in Thailand, 24% in Malaysia and 21% in Indonesia. More strikingly, as compared with domestic saving rates of 30% of GDP in Malaysia, 25% in Korea, 24% in Thailand and 25% in Indonesia, Sri Lanka's average saving rate was only 13%. Second, the average productivity of investment in Sri Lanka has also been much lower; the average return on capital in Sri Lanka was about 21% as compared with 33% in Korea, 31% in Thailand, 27% in Malaysia and 26% in Indonesia. Third, the performance of agriculture, particularly over the past two decades, has been weak. For example, over the 1970-92 period, Sri Lanka's agriculture sector grew at about 2.3% p.a. as compared with 4.2% in Thailand, 4.1% in Malaysia and 3.5% in Indonesia. Finally, Sri Lanka's overall export growth over the past thirty years has been rather poor. Thus, the volume of exports has expanded at an average rate of only 1.6% between 1960 and 1992, as compared with 20% in Korea, 11% in Thailand and 10% in Indonesia. Although manufactured export performance has improved substantially in response to liberalization policies since 1977, the export base remains fragile and narrowly concentrated on a small number of commodities.

These weaknesses in economic performance largely reflect the effects of policy problems in a number of critical areas, although the ongoing civil war has further compounded the difficulties and added to the budgetary imbalance. The policy problems include: weak macroeconomic management, reflected in relatively high fiscal and balance of payments deficit and high inflation; weak public expenditure management; mixed performance on exchange rate management, with periods of substantial overvaluation; a long period of substantial trade protection, followed by trade liberalization on a rather selective basis (agriculture incentives remain distorted); financial sector policies that continue to hamper efficient financial intermediation despite some recent improvements; agriculture policies that have been least reformed over the past 30 years and continue to constrain agriculture performance; and policy distortions that limit the flexibility of the labor market. Even in the area of human development, where Sri Lanka has an outstanding track record, there are concerns about the quality of the labor force.

Reform efforts in the past sought to address many of the above policy problems with varying degree of success. The main difficulty has been the stop-go pattern of reforms due to political constraints, even though the results of the reforms were generally positive. With a new government voted into power in 1994, there is a real opportunity for taking control and ensuring sustained progress with the critical policy reforms. In addition to intensifying efforts to peacefully resolve the civil conflict, Sri Lanka would need to strengthen and sustain efforts to address the substantial unfinished policy agenda. The nature of these challenges and implications for future reforms are discussed below.

Macroeconomic Management: The task of securing and maintaining a stable macroeconomic environment has proven to be the Achilles Heel of Sri Lanka's economic management throughout the period. Fiscal deficits have generally been high for the entire period. The balance of payments deficits were relatively low up to the late 1970s, but have expanded since 1979. To a large extent, these deficits in the balance of payments and the fiscal account reflect the surge in concessional foreign aid since the late 1970s. Nevertheless, large macroeconomic imbalances, particularly fiscal deficits, have contributed to a rapid growth in domestic and international indebtedness, fueled a relatively high rate of inflation, and complicated monetary policy management in Sri Lanka's open economy. Although the growth in international debt did not create any significant debt servicing problem partly because of the high concessionality of the debt flows, the growth in domestic debt has generated some elements of dynamic instability. Thus, in 1992, the government's interest payment obligations (mostly on domestic debt) ate up almost 6% of GDP or a third of total tax revenue.

Clearly, a major challenge for Sri Lanka in the coming years will be to squarely address its macroeconomic imbalances. Despite good progress in recent years to bring down the fiscal deficit from double to a single digit number, a fiscal deficit of 8-9% of GDP is unsustainably large. Given the already large stock of public debt, Sri Lanka cannot continue to run a deficit in its primary budget balance for any substantial period in the future without running into a financial crisis. So, there is a need to convert the primary deficit into surplus to maintain internal balance. The magnitude of the fiscal effort is in the range of 4-5% of GDP. In view of Sri Lanka's already good tax effort (19% of GDP), much of the fiscal deficit reduction will need to come from further expenditure cutbacks and redefining public expenditure priorities. Rapid progress with the peace initiative will help in this task by reducing defense spending. However, there is some further scope for additional revenue mobilization through better cost recovery policies for public services. Lower fiscal deficit will help raise domestic saving and reduce inflation through reduction in excess demand resulting from excess money supply. It will also help contain the pressure on domestic interest rates.

The management of the exchange rate has improved considerably in the 1980s with the unification of the exchange rate and the move to a crawling peg adjustment mechanism. But a combination of large government spending and large capital flows, especially official aid, has generated pressure on the real exchange rate (RER) to appreciate. While exports have continued to do well, following the trade and investment reforms of the 1977-82 and 1990-92 periods, there is a substantial risk that the continued RER appreciation will hurt exports. A reduction in government spending and lower fiscal deficits will again help. Careful management of foreign aid and private capital flows will be necessary to avoid large demand pressure in the non-traded sector. Financial deepening through further financial sector deregulation will also assist in avoiding an appreciation of the RER.

Trade and Industrial Policies: The reform of trade and other policies to promote industrial development has been the subject of debate in Sri Lanka and outside. Sri Lanka's own experience with trade protection has shown the pitfalls of relying on government intervention for industrial development. Inward looking policies of the 1970-77 period, for example, seriously hurt exports and sharply reduced the growth of the manufacturing sector. On the other hand, the positive response of exports and the manufacturing sector to trade and other liberalization policies since 1977 suggest the potential benefits of further liberalization. So, it would seem that Sri Lanka's development objectives would be better served through reliance on neutral incentives.

Notwithstanding good progress in liberalizing trade policies, there is substantial scope for further reducing the bias against exports induced by the trade policy regime. While many of the quantitative restrictions have been eliminated, a number of restrictions affecting particularly agriculture remain in place. Moreover, a combination of specific duties, surcharges, exemptions and waivers has resulted in a fairly complex tariff regime. These have continued to impart a bias against exports and have generally reduced investment efficiency. Future trade policy reforms should concentrate on eliminating most quantitative restrictions, further reducing tariff protection and simplifying the tariff structure. To ensure proper implementation of these reforms, a reform of the customs department may also be needed. Options here include use of external assessment firms (such as the SGS) for preshipment inspection. Other countries, such as Indonesia, have successfully used this option to minimize leakages and abuse.

Sri Lanka continues to rely on a number of fiscal incentives (tax holidays and import duty exemptions) to promote private investment, especially in the manufacturing sector. Particularly, since 1990, Sri Lanka has offered generous tax incentives to promote foreign investment and exports. Overall, these incentives distorted resource allocation and contributed to macroeconomic imbalance by reducing budgetary revenues. In light of these problems, a better policy option would be to replace tax holidays with: (i) a low flat corporate rate of taxation consistent with international standards; and (ii) limited use on investment tax credit aimed at new investments which are consistent with Sri Lanka's long-term development needs.

Sri Lanka has come a long way in deregulating its investment licensing regulations. However, a number of regulatory restrictions in the area of employment, exit and bankruptcy procedures continue to impede investment in manufacturing and services. The flexibility of labor market should be increased (discussed below) while the Companies Act and the Bankruptcy Law should be simplified and made more flexible to facilitate winding up of business when needed.

A notable feature of the East Asia experience is good communication between the government and business which contributed to the development of a business-friendly environment. In addition to a generally favorable business environment, formal mechanisms were established in a number of countries to have regular consultation between government and business on relevant policies. The focus was on improving competition and sharing information, rather than collusive behavior for rent seeking. Similar consultative arrangement between private sector and the Sri Lankan government might be very useful in disseminating information, developing right policies and building consensus, and proper implementation of policies.

Financial Sector Policies: Past reforms in Sri Lanka's financial sector have helped to deepen the financial sector, as indicated by the growth in the ratio of bank deposits to GDP. This has contributed positively to increasing private saving and helped in reducing the adverse effects of high government expenditure and large aid inflows on the RER. Yet, a substantial unfinished agenda remains. The financial sector remains much less developed than in the East Asian high-performing economies. For example, even with past progress, the deposit to GDP ratio is only 24% in Sri Lanka as compared with 38% in Korea, 48% in Indonesia, 57% in Malaysia and 78% in Thailand. Sri Lanka has moved well in deregulating interest rates. However, a major constraint that remains is the dominance of inefficient, state-owned banks. Despite poor financial performance, these banks have continued to dominate the financial sector because of various government support including privileged access to deposit sources. The resultant lack of competitive pressure has reduced both the level and quality of financial intermediation. Quality has suffered due to two reasons. First, the state-owned banks have been used as instruments of government policy to direct credit to politically determined beneficiaries, often without regard to financial or economic viability. Second, these banks have played the role of market-makers in determining domestic lending rates. Consequently, while inefficiency resulting from over-staffing and bad portfolio has raised the cost of doing business, the effect of these inefficiencies on cost has often been passed on to the borrowers in terms of higher loan rates. As a result, the spread between average deposit and lending rate has been very high.

Recent steps to increase competition has included efforts to legislate a banking reform act that would provide greater autonomy to the state-owned banks and place the private commercial banks on the same footing as the two state-owned banks. A speedy implementation of this measure will be an important first step. Nevertheless, this by itself will not be adequate. The main policy change that is needed to enhance the dynamism of the financial sector is to privatize the two state banks. Along with this key reform, steps will also need to be taken to strengthen supervision capacity of the Central Bank to ensure the soundness of the banking sector in a more competitive environment. Sri Lanka's small but growing capital market has shown dynamism in recent years as direct foreign investment has been growing in response to the various deregulation measures. Nevertheless, the state's control over the use of insurance and pensions fund has tended to reduce the effectiveness of the capital market. Not surprisingly, most of resources mobilized in these institutions have been channelled toward the purchase of T-bills to reduce the cost of the budget deficit. The privatization of insurance companies has been under consideration for sometimes as a way of increasing competition and efficiency in insurance. Implementation of this reform will also benefit capital market development by allowing more flexible use of insurance funds. Similarly, an independently managed public pensions fund is also likely to help the capital market as investment decisions are likely to be guided by profitability considerations rather than dictated by the need to finance the budget deficit at lower cost (i.e., purchase of T-bills).

Agriculture Policies: Unlike the East Asian economies, Sri Lanka's agriculture sector performance has generally been weak. Value-added in the tree crops sector has virtually stagnated and paddy experienced mixed performance. Other crops (chillies, onions, potatoes) have done relatively better; but there are serious efficiency concerns in many of these crops. Factors contributing to the sector's poor performance include nationalization of estate plantations, trade policy distortions, absence of a well-functioning land market and weak support services. In the tree crops sector, the main challenge is to privatize the estate plantations. Some progress has been made in this regard since 1992. The reform effort, however, has been slow and hesitant. Given political sensitivity, the implementation of privatization could be phased over a longer period through a system of long-term management contracts (50 years or more) and gradual sale of assets in the form of shares. At the same time, the Government should remove all remaining restrictions on marketing, refrain from involvement in wage setting and restructure tree crop research institutes to allow greater private sector involvement.

In the non-plantation agriculture sector, reforms are needed in the areas of trade, land markets and support services. The most important trade policy issue affecting agriculture concerns the control of rice trade. There are also restrictions on import of wheat, potatoes, chillies and onions. Except in the case of wheat, the main aim of trade controls has been to protect farmer incentives. As a result of these policies, a fairly distorted production pattern has emerged. As in the case of the manufacturing sector, neutral incentives would probably be better for boosting agriculture performance than a strategy of guiding specific production activities through trade protection. Even in agriculture, a small economy like Sri Lanka will likely benefit more from opening up to trade. Reconciling objectives of food security and protection of farmer income with production efficiency considerations could involve some trade-offs, but these can be made consistent with outward orientation. Thus, while lower trade protection for rice, onions, potatoes and chillies could hurt producers in the short-term, the medium-term gains from diversification toward other, more efficient crops would likely improve total income from agriculture. In addition, rice and other farmers facing lower protection need not lose over the medium term if better support services are provided to increase productivity.

Changes in trade policy alone will not lead to greater efficiency and higher growth in agriculture. A major constraint that needs to be addressed as well is the lack of a well-functioning land market due to the state's role as the dominant landlord, restrictions on land sale and use, and inadequate land registry. The Government has been working on a legislation to facilitate land titling and to speedily resolve land disputes. This effort should be translated into action as soon as possible. In addition, measures are needed to give clear land titles to settlers in colonies, effectively implement Agrarian Services Amendment Act of 1991 (by which all restrictions on land use were removed) and prepare a program to divest to the private sector all government-owned land presently devoted to agriculture. Third, there is a need to boost the availability of efficient support services. This entails (i) making more efficient use of irrigation water through better O&M, supported by cost recovery and farmer involvement in canal maintenance; (ii) strengthening research and extension by allocating more budgetary resources, greater outreach effort to disseminate research findings, involving users in determining the research agenda, and using private sector research facilities; (iii) making a careful assessment of rural infrastructure needs, particularly rural roads, and support priority needs through public expenditures. A careful review of rural financing services is also needed; based on this review there may be a need to support the development of rural financing institutions. The nature of this support should be based on lessons of experience from other countries (e.g. the Grameen Bank in Bangladesh, the Kuppedes in Indonesia).

Policies for Enhancing Labor Market Flexibility and Labor Quality: An important feature of the East Asian experience has been the flexible working of the labor market, with employment and remuneration decisions largely based on market factors. The growth in employment and wages came from rapid economic growth and not through non-market government interventions. Labor market in Sri Lanka has not worked as efficiently. An estimated third of total employment, belonging to the public sector and large private enterprises, has been subject to various types of non-market interventions. As a result, wages in the regulated sector have been higher than their market clearing levels and there is an excess supply of labor in this market. Since employment in this regulated sector is associated with a much larger share of total investment and value-added than the employment share, the economy-wide ramifications of the distortions for economic growth and employment have been quite serious. The adverse effects have been compounded by the relatively low quality of Sri Lanka's labor force, notwithstanding Sri Lanka's overall strong achievements in human development.

Policies for enhancing the flexibility of labor market would need to eliminate the distortions in the employment and remuneration decisions in the regulated market. The main reforms include removing government involvement in the hiring and wage setting decisions in the state plantations and other corporations, deciding civil service employment on the basis of needs rather than political expediency, and eliminating the TWA (termination of workers act which restricts labor mobility in large public enterprises). Admittedly, implementing these reforms will pose a major challenge in view of political sensitivities. On the other hand, a failure to address these distortions might seriously constrain Sri Lanka's ability to attain the NIC status. The situation calls for a sensitive handling of these reforms but not an indefinite postponement.

Reforms for improving the quality of labor would need to address the concerns in both general education and vocational training. There is a need to improve the composition of public spending on primary and secondary education. At present most resources go to finance teacher salaries, leaving very little for materials and supplies. Teachers are generally in excess supply in the cities. So, a reduction in the number of teachers in the cities will reduce the salary bill and release resources for essential school supplies and materials. Greater emphasis on science and English as a second language will improve the ability of students to respond better to the needs of the job market. More generally, a careful review of the curriculum and appropriate revisions in light of Sri Lanka's development needs and market demand will help improve the quality of human capital. Efforts to enhance the quality of trainers--the teachers--are also needed. Sri Lanka needs to rethink its skill development program. International evidence shows that training programs are most likely to succeed when sponsored and implemented in collaboration with prospective employers. There are various ways how Sri Lanka could reorganize its training programs to make it demand based. The main need is to ensure a strong involvement of the private sector (employers) in the design and implementation of the training programs.

I. INTRODUCTION

1. Sri Lanka has made very impressive progress since independence in reducing the incidence of poverty. This is reflected in terms of human development as well as when poverty is measured in consumption terms. Indeed, Sri Lanka's progress with human development stands out when compared with other countries at similar income levels. The progress with poverty reduction was made possible by a combination of two factors: (i) a strong push on human development and equitable income distribution through public expenditures; and (ii) a relatively good growth performance--3% per capita GNP growth rate over the past 40 years, exceeding the rate achieved in South Asia, Latin America and low income countries in general.

2. Despite this progress, Sri Lanka's poverty problem remains substantial. While the improvement in human development has been outstanding, Sri Lanka remains a low income economy. Although Sri Lanka's per capita growth rate compares favorably with most of the developing world, it falls much short of the growth rate achieved by the high-performing East Asian countries (see Table 1). Thus, in 1960 Sri Lanka's per capita income in nominal dollars was 276% higher than in Indonesia, 46% higher than in Thailand, about the same as in South Korea and about 50% lower than in Malaysia. Some 30 years later, Sri Lanka's per capita income is now less than a 12th of that in Korea, only a fifth of that in Malaysia, less than a third of Thailand and 24% below that in Indonesia. A stronger growth performance along the lines of the high-performing East Asian economies would have allowed much deeper reduction in Sri Lanka's poverty.

Table 1: Per Capita GDP in Sri Lanka and Comparators, 1960-92
(US Dollars, Current Prices)

	At Nominal Exchange Rate		Per Capita Real GDP Growth Rate
	1960	1992	(1960-92, % p.a.)
Sri Lanka	142	540	2.5
Korea	156	6790	6.5
Malaysia	275	2790	4.2
Thailand	97	1840	5.2
Indonesia	51	670	3.4

Source: WDR (various issues).

3. What factors explain why, despite solid human development, Sri Lanka has fallen far behind the dynamic East Asian economies in raising its per capita income? What are the key lessons for the future, especially in view of Sri Lanka's aspirations to achieve the status of a newly industrializing country (NIC) around the turn of this century? These are some fundamental questions the Sri Lankan policy makers need to ask in preparing to address the development challenges it faces in the mid-1990s and beyond.

4. The objective of this paper is to analyze growth performance in Sri Lanka over the past three decades with a view to identifying the key factors that explain past performance and drawing policy lessons for the future. The analysis hopefully will provide a useful input to the Sri Lanka's own search for the right policy mix aimed at improving the living standards of its population. The paper is organized as follows. Section II contains a brief review of the cross-country growth analysis literature. Based on this review, an aggregative growth model for Sri Lanka that links policies with the growth outcome is developed and estimated using time series data. Given the inherent limitations of an aggregative time series growth model, in Section III the discussion focusses on

a more detailed, heuristic review of the key policy parameters that underlie Sri Lanka's performance. The analysis here uses the East Asian experience as a paradigm. In particular, specific attention is given to the experience of Korea, Malaysia, Thailand and Indonesia as comparators. Finally, the implications for future policy are indicated in Section IV.

II. HOW POLICIES INFLUENCE ECONOMIC GROWTH--STATISTICAL ANALYSIS

5. In the traditional neo-classical framework a la Solow (1956), the rate of economic growth is determined by the rate of accumulation of capital and labor and by exogenous technical progress. In this framework, policies have only a transitory effect. The steady state per capita growth rate is only a function of exogenous technical change, unrelated to policies. Since the seminal work of Solow (1956), there has been considerable interest in examining whether long-term economic growth is exogenous (unrelated to policy) or endogenous in the sense that technical change is influenced by policies and therefore becomes an endogenous variable. Interesting modifications along these lines include Romer (1986) and Lucas (1988). Romer and Lucas endogenize technical progress by allowing for externalities in the accumulation of physical and human capital respectively. Thus, policies that encourage or discourage physical or human capital will affect long-term growth accordingly. Much empirical work has been devoted in recent years to identifying policies that influence physical and human capital accumulation and the efficiency with which these are used.

6. **Summary of Cross Country Evidence:** A brief examination of the empirical growth literature suggest a role for the following determinants of growth. The results reviewed and reported here are only indicative and are not meant to be exhaustive or conclusive.

- **Initial conditions:** The role of initial conditions is expected to pick up the influence of two factors. First, in endogenous growth models the initial endowment of human capital will allow a faster rate of technological progress; so countries with better equipped initial human capital stock are expected to grow faster, ceteris paribus. Second, in the neoclassical model, poorer countries with low initial capital-labor ratios are expected to grow faster because of higher marginal product of capital. Using a sample of 98 countries for the period 1960-85, Barro (1991) finds that for a given starting value of per capita GDP, a country's subsequent growth rate is positively related to the initial level of human capital as measured by enrollment ratios. As well, holding constant a set of variables including human capital, initial per capita GDP is negatively related to per capita income growth. A similar result is also reported by the World Bank's East Asian Miracle Study (1993).

- **Fiscal policy:** A number of fiscal variables has been used in empirical work. Three commonly used variables are the share of government consumption in GDP, the share of public infrastructure investment in GDP, and the GDP share of public spending on health and education. Government consumption is expected to lower growth through distortionary taxation or expenditure programs. Public investment in infrastructure is expected to raise the productivity of private investment and growth. Public spending on education and health is expected to raise growth by increasing labor productivity. Barro (1991) finds a negative association between government consumption (excluding defense and education) as a share of GDP and per capita GDP. Easterly and Rebelo (1993), in a cross-country study for the period 1970-88, find that public investment in transport and communication is positively correlated with growth. Similar evidence on the positive impact of public infrastructure investment on growth was also reported by Baffes and Shah (1993).

- **Outward orientation:** Greater outward orientation is expected to have a positive impact on growth, resulting from better access to markets, finance and technology. Many studies have found a positive influence of outward orientation on growth. These include Havrylyshyn (1985), Edwards (1989) and Dollar (1990). In a more recent study Dollar (1992) obtains results which show that trade liberalization and appropriate exchange rate management improves growth performance.

- **Monetary and financial policies:** Empirical investigations of the role of monetary and credit policies, including the impact of inflation, on growth have yielded mixed results in a cross-country framework. The East Asian Miracle Study (1993) finds a significant negative relationship between inflation and growth in a cross country framework. But time series investigation for Korea, Taiwan and China, however, do not yield significant coefficients. Regarding financial development and growth, Goldsmith (1969), Mckinon (1973) and Gelb (1989) find a positive relationship between growth of domestic financial market and economic growth. However, one unresolved issue is the direction of causality. Also, Gelb's finding of a significant positive statistical relationship between growth and real interest rate has been called in question by the East Asian Miracle Study.

- **Inequality and growth:** Income distribution can affect growth through different channels: increased inequality causes greater conflict over distributional issues, thereby encouraging greater intervention in the economy; also, greater inequality can hinder human capital formation. Alesina and Rodrik (1991) found that higher inequality tends to lower growth in the subsample of democracies but is insignificant in nondemocratic countries. Persson and Tabellini (1991) find similar results. Clark (1992) found that growth was negatively affected by inequality.

7. **Implications for Sri Lanka:** The above review suggests that it is possible to investigate Sri Lanka's growth outcome using a statistical framework that seeks to explain this growth in terms of underlying policies--fiscal, monetary, financial, trade and income distribution (see also Box I)

8. The statistical investigation of the determinants of growth in Sri Lanka is premised on the hypothesis that per capita growth rate depends on the level and the efficiency of use of investment. The investment rate and its efficiency in turn depend upon a number of policy variables. These include: fiscal policy, monetary policy, financial policy and trade policy. Fiscal policy is measured in terms of two variables: share of government consumption in GDP and public spending on health and education; monetary and financial policies are approximated by the rate of inflation and the real interest rate; trade and external payments policies are measured in terms of two variables: black market premium and the rate of growth of exports. The role of income inequality could not be investigated due to lack of time series data. The regression was run using OLSQ on annual time series data over the period 1970 to 1992. The data was not extended to 1960 because of concern with the reliability of the data base for some of the earlier years. A slope dummy for the investment rate variable was included to capture the impact of the civil conflict over the 1983-88 period.

Box 1: Role of Initial Conditions

What are the possible effects of initial conditions? That is to what extent, if any, Sri Lanka was left behind by Korea, Malaysia, Thailand and Indonesia because it had poorer initial endowment of human capital or because Sri Lanka was richer and therefore experienced diminishing marginal productivity? Let us first look at the initial level of human capital (see Tables 2 and 3). School enrollment ratios in 1960 were roughly comparable for Sri Lanka, Malaysia and Korea, while Thailand and Indonesia lagged behind. Indeed, Sri Lanka had an edge over the comparator East Asian economies in terms of other indicators of human development. One cannot, therefore, argue that the East Asian economies grew faster because they had better access to human capital. What about the initial level of GNP per capita? Here, it is hard to find any systematic relationship. In nominal dollars, Sri Lanka's per capita income was roughly comparable with Korea, about half of that of Malaysia and much higher than in Thailand and Malaysia. In PPP-adjusted terms, Sri Lanka's income was about the same as in Thailand, lower than in Malaysia and higher than in Korea and Indonesia. So, it appears implausible that these other countries grew faster than Sri Lanka partly because their initial per capita incomes were lower.

Table 2: School Enrollment Ratios in Sri Lanka and Comparators
(% of Age Group Enrolled)

	Primary		Secondary		Tertiary	
	1960	1991	1960	1991	1960	1991
Sri Lanka	95	108	27	74	1	5
Korea	94	107	27	88	5	40
Malaysia	96	93	19	58	1	7
Thailand	83	113	12	33	2	16
Indonesia	67	116	6	45	1	10

Source: WDR (various issues).

Table 3: Other Social Indicators for Sri Lanka and Comparators

	Infant Mortality Rate /a		Life Expectancy at Birth		Adult Literacy Rate	
	1960	1992	1960	1992	1960	1992
Sri Lanka	71	18	63	72	75	89
Korea	85	13	56	71	71	97
Malaysia	73	14	57	71	48	80
Thailand	103	26	56	69	68	94
Indonesia	139	66	41	60	39	84

/a Per 1,000 live birth.

Source: WDR and World Tables (various issues).

9. The initial regression was run with its full specification (see Box 2). The coefficients of inflation and interest rate variables came out insignificant and the inflation variable had the wrong sign. The results are not very surprising. As noted, the empirical evidence cited in the literature regarding the relationship between inflation, real interest rate and growth is inconclusive. Moreover, it has also been argued that the relationship between growth and inflation may be positive up to a certain rate of inflation and then turn negative for higher rates of inflation [see Dorrance (1966) and Thirlwall (1978)]. Indeed, dropping these variables considerably improved the explanatory power of the regression. Share of government expenditure on human capital came up with the wrong sign and was statistically insignificant. This possibly is a poor proxy for measuring the effect of human capital on Sri Lankan per capita growth. Alternatively, since the investment rate is supposed to pick up the effects of spending on both physical and human capital, the separate influence of public spending on human capital did not show up. This variable was also dropped. Results of the final regression are shown in Table 4.

Box 2: Determinants of Per Capita Growth--Model Specification

The basic model expresses the growth of per capita GDP (GPGDP) as a function of the fixed investment rate (INVR), share of government consumption (GOVCON), public expenditure on human capital (PEHK), the inflation rate (INF), the real interest rate (RINT), the black market exchange premium (BLPREM) and the growth of exports (GEXP). Thus,

$$GDGP=F(INVR,\ GCON,\ PEHK,\ INF,\ RINT,\ BLPREM,\ GEXP) \quad \ldots\ldots\ldots\ldots (1)$$

Linearizing:

$$GDGP= a_0 + a_1\ INVR + a_2\ GCON + a_3\ PEHK + a_4\ INF + a_5\ RINT + a_6\ BLPREM + a_7\ GEXP \quad \ldots\ldots\ldots\ldots (2)$$

The expected signs of the coefficients are:

$a_1>0$; $a_2<0$; $a_3>0$; $a_4<0$; $a_5>0$; $a_6<0$; $a_7>0$

10. The statistical findings reported in Table 4 show that the coefficient of the black-market premium is significant at the 95% level. The coefficient of the share of government consumption in GDP is also significant at the 95% level. The coefficient of the investment rate is significant at the 90% level. Also, the civil conflict adverse effect dummy is significant at the 90% level. However, the coefficient of the growth rate of exports is only significant at the 82 % level. Overall, the regression performs reasonably well and explains about 43% of the variance in Sri Lanka's per capita growth. More importantly, the economic interpretation of the results are very meaningful.

Table 4: Sri Lanka: Determinants of Per Capita Economic Growth--Regression Results (1970-92)

Variable	Constant	INVR	GCON	BLPREM	GEXP	INVDUM
Coefficient value	2.824	0.120	-0.198	-0.015	0.026	-0.051
t-ratios	(1.35)	(1.71)	(-1.73)	(-1.96)	(1.25)	(-1.79)
Adjusted R^2 = 0.43			D.W. = 1.81		F = 4.37	

Note: INVDUM = Slope dummy for the INVR with 1983-88 period taking a value of 1, and 0 otherwise.

11. The main implications of this statistical investigation can be summarized as follows:

- Consistent with the findings of the cross-country regression analysis, per capita GDP growth in Sri Lanka is significantly related to the investment rate. Causality test (Granger Causality test) confirms that the causality is from investment rate to per capita growth and not the other way round.

- Surprisingly, however, the significance of the coefficient is at the 90% level and not higher. This can be explained by the relatively low productivity of the investment effort. Indeed, total factor productivity estimates show that Sri Lanka experienced negative factor productivity over a substantial part of the 1970-92 period.

- As expected, the civil conflict reduced the efficiency of investment.

- There is significant evidence that larger government consumption adversely affected growth in Sri Lanka. This is consistent with Barro's findings from cross-country analysis [Barro (1991)]. The result is quite appealing because the share of public consumption has been going up in Sri Lanka, with a large part being diverted to non-productive uses. Much of the revenues raised to finance government consumption has relied on instruments with relatively high efficiency costs--international trade and domestic sales taxes.

- The highly significant negative coefficient for the black market premium variable suggests the negative role played by foreign exchange controls in Sri Lanka. More broadly interpreted, this variable is also a proxy measure for macroeconomic instability. The significant negative correlation with growth is consistent with the findings of the East Asian Miracle Study which shows that the high-performing East Asian economies had a relatively stable macroeconomic environment.

- There is some support for the positive role of export performance for growth. However, the low statistical significance of the coefficient casts doubt on the reliability of the relationship. This probably reflects the fact that trade liberalization policies have been implemented seriously only after 1977 and, moreover, a substantial unfinished agenda remains.

IV. POLICY DETERMINANTS OF SRI LANKA'S GROWTH--A DISAGGREGATED APPROACH

12. In the previous section we looked at the statistical relationship between Sri Lanka's growth performance, its investment rate and proxies for a number of policy variables. In addition to the positive impact of investment rate on growth, we found supportive evidence for the role of fiscal policy (share of government consumption in GDP), and overall macroeconomic management (proxied by the foreign exchange black market premium). These results are intuitively appealing and provide useful guidance to policy. However, the constraints imposed by data in terms of quality and quantity, including finding the right proxy, limit the possibility of probing econometrically the role of various other policies in explaining growth in the context of an aggregative time series model. So, below a more disaggregated and somewhat heuristic approach to the policy determinants of economic growth is used to better inform the policy debate. The experience of the East Asian economies is particularly relevant in this regard.

The East Asia Paradigm

13. Between 1965 and 1990 average real per capita GNP in the East Asia and Pacific Region expanded by 5.3 % per annum, highest for any region including high-income economies, and much higher than the world average (1.5%). Most of this exemplary growth performance is explained by the performance of eight countries--Japan, the Republic of Korea, China, Taiwan, Singapore, Malaysia, Hongkong, Thailand and Indonesia. Many studies have been undertaken to understand better the determinants of economic performance in these dynamic economies and the relevant lessons for other countries. In particular, a recent study by the World Bank--The East Asian Miracle--has probed quite deeply the factors explaining growth in these economies and the implications for policies. The study identifies the following common characteristics shared by these fast growing economies:

- Overall high rates of productivity growth;
- More rapid output and productivity growth in agriculture;
- Higher rates of growth of manufactured exports;
- Higher growth rates of physical capital, supported by higher rates of domestic savings;
- Higher initial levels and growth rates of human capital;
- Earlier and steeper decline in fertility; and
- Declining income inequality and reduced poverty.

14. To what extent Sri Lanka shared these features? Let us start with the favorable ones. As noted earlier, Sri Lanka stands out as a country with very impressive human development indicators. This is both a reflection of favorable initial human capital endowment as well as sustained progress based on Sri Lanka's firm commitment to human development (see Box 3). Similarly, Sri Lanka has done very well in population management. The total fertility rate has been declining steadily from 4.3 in 1970 to 2.5 in 1992. The 1992 rate is close to the East Asia and Pacific average of 2.3. Its current population growth rate of 1.1% per annum compares favorably with the 1.2% for the East Asia and Pacific region.

Box 3. Explaining Sri Lanka's Progress with Human Development: Initial Conditions or Policies?

The issue of the role of initial conditions versus the impact of policies and programs for human development in explaining Sri Lanka's exceptionally good performance in this area has been intensely debated. Isenman (1980) and Sen (1981; 1988) have attributed Sri Lanka's exceptional performance to Sri Lanka's commitment backed by aggressive social welfare programs. On the other hand, Bhalla and Glewee (1986) and Bhalla (1988) have argued that much of Sri Lanka's good human development performance is explained by the fact that Sri Lanka started out with good human endowment as early as since its independence and certainly since 1960. If one allows for this factor, the outlier nature of Sri Lanka's performance and the role of policies such as the very generous social welfare programs become questionable. In a rejoinder, Isenman (1987) has shown that his conclusions regarding Sri Lanka's exceptionally good performance and the strong positive role of social welfare programs remain valid even allowing for initial conditions. As well, in a more recent study Isenman et.al. (1994) reach a similar conclusion.

15. Regarding progress with reducing income inequality and poverty, the performance is somewhat mixed. Although income inequality and poverty have both been reduced over the past thirty years (see Table 5), with a more rapid pace of GDP growth the pace of progress in reducing poverty could have been much better. A major social problem in Sri Lanka has been the rather high rate of open unemployment. A further problem is the low-income employment in rural and urban informal sectors. This is partly the result of relatively low GDP growth, but also reflects policy-induced distortions in the labor market and the low quality of education and training.

Table 5: Trend in Poverty and Income Inequality in Sri Lanka

	1960	1970	1980	1992
A. Social Indicators				
- Life expectancy at birth (yrs.)	63.0	64.7	68.1	72.0
- Infant mortality rate /a	71.0	53.2	34.4	19.3
- Adult literacy rate /b	75.0	82.4	85.0	89.0
- Primary school enrollment /c	95.0	99.0	100.0	108.0 /d
- Secondary School enrollment /c	27.0	47.0	51.0	74.0 /d
	1963	1982	1985-86	1990-91
B. Consumption Poverty				
- Head count index (%)	37.0	27.0	27.3	22.4
C. Measure of Inequality				
- Gini coefficient (%)			32.04	29.66

Source:
1. Social indicators are from WDR (various issues) and World Tables (various issues).
2. Estimates of consumption poverty for 1985-86 and 1990-91 are from the World Bank's Sri Lanka Poverty Report (1994). The 1963-82 estimates refer to income poverty and are obtained from the 1990 WDR. Note that the two sources of poverty estimates are not comparable.
3. Gini coefficient estimates for 1985-86 and 1990-91 are from World Bank's Sri Lanka Poverty Report (1994). They refer to consumption distribution rather than income.

16. The comparison is not very favorable in terms of the other characteristics of the East Asian high flyers. Let us start with capital formation. On average Sri Lanka invested about 20% of its GDP over the past 32 years (see Table 6). The average investment rate in the high-performing East Asian economies exceed this rate--Korea(26.5%), Malaysia(23.7%), Thailand (24.6%) and Indonesia (21%). More importantly, the efficiency of investment was much lower in Sri Lanka (see Table 7). Thus, the average return on capital in Sri Lanka was about 21% as compared with 33% in Korea, 31% in Thailand, 27% in Malaysia and 26% in Indonesia. Estimates of total factor productivity show that the contribution of TFP improvement to growth has generally been very small, with a long period of negative contribution (see Table 8).

17. Another major weakness in Sri Lanka has been the low domestic saving rate. The average saving rate of about 13% of GDP in Sri Lanka compares quite poorly with saving rates of over 30% in Malaysia, 25% in Korea, 24% in Thailand and 25% in Indonesia. Although the net inflows of unrequited factor income (basically worker remittances), boosted the national saving performance somewhat, the gap between saving and investment remains significantly large (see Graph 1).

Table 6: Savings, Investment in Sri Lanka and Comparators
(Average p.a., % of GDP)

	1960-64		1965-69		1970-74		1975-79		1980-84		1985-92		1961-92	
	GDI	GDS	GDI	GDS	GDI	GDS	GDI	GDS	GDI	GDS	GDI	GDS	GDI	GDS
Sri Lanka	14.5	NA	15.4	9.7	16.5	13.5	18.4	13.8	29.4	13.7	23.0	12.8	19.9	12.8
Korea	13.9	NA	22.9	13.6	25.9	17.6	30.0	25.4	29.7	26.6	32.9	35.8	26.5	25.1
Malaysia	15.1	NA	15.6	24.2	23.1	26.9	25.5	32.5	34.8	31.6	27.3	33.9	23.7	30.5
Thailand	18.2	NA	23.8	21.8	24.9	22.6	26.6	21.9	25.3	20.2	27.8	29.6	24.6	24.0
Indonesia	12.1	NA	8.0	3.7	16.6	20.8	20.5	28.1	26.7	31.5	28.3	33.5	20.4	25.0

Source: World Tables; IFS (various years)

Table 7: Average Rate of Return on Investment in Sri Lanka and Comparators
(% p.a.)

	GDP Growth Rate			Average Investment Rate			Average Rate of Return		
	1960-70	1970-80	1980-90	1960-70	1970-80	1980-90	1960-70	1970-80	1980-90
East Asia & Pacific	--	6.6	7.8	--	28.4	30.5	--	23.2	25.6
Korea	8.6	9.1	9.7	19.0	28.0	30.6	45.3	32.5	31.7
Malaysia	6.5	7.8	6.0	15.8	26.3	30.8	41.1	29.7	19.5
Thailand	8.4	7.2	7.6	22.7	25.9	26.8	37.0	27.8	28.4
Indonesia	3.9	7.8	5.5	10.2	22.6	23.9 /a	38.0	34.5	23.0
Sri Lanka	4.7	4.0	4.3	15.1	17.5	25.4	31.1	22.9	16.7

/a Fixed investment only.

Data Sources: 1993 World Table; 1986 IFS Yearbook and 1994 WDR.

Table 8: Sri Lanka Contribution of Total Factor Productivity to Growth
(% p.a.)

	1960-70	1971-77	1978-82	1983-89	1990-92	1960-92
Contribution of						
Capital	2.10	1.76	4.62	2.52	1.94	2.48
Labor	1.19	1.28	1.82	1.38	2.16	1.44
TFP change	1.41	-0.13	-0.21	-0.69	0.93	0.42
GDP growth	4.70	2.91	6.23	3.21	5.03	4.34

Note: The weights of Labor and Capital are derived from a Cobb-Douglas production function with constant returns to scale. The weights are: labor 0.6 and capital 0.4. Capital stock is estimated from investment data using the perpetual inventory method. Employment data is obtained from Korale (1990) and the 1990 Labor Force Survey. Missing data are interpolated.

18. A third negative factor has been the weak growth performance of the agriculture sector (see Table 9). Partly because of this, the sector's GDP share has been declining quite noticeably. On the other hand, the dependence of Sri Lanka's population on agriculture for employment and income remains substantial. Therefore, continued high rural poverty and low-income rural employment are directly related to the weak growth outturn in agriculture.

Table 9: Comparative Agricultural Growth Performance
(% p.a. in real terms)

	1970-80	1980-92
Sri Lanka	2.8	2.1
Korea	2.7	1.9
Indonesia	4.1	3.1
Malaysia	4.7	3.6
Thailand	4.4	4.1

Source: WDR 1994.

19. Finally, overall export growth over the past thirty years has been rather poor. Thus, the volume of exports has expanded at an average rate of only 1.6% between 1960 and 1992. In contrast, exports expanded by 20% p.a. in Korea, 11% p.a. in Thailand and 10% p.a. in Indonesia. Although manufactured export performance has improved substantially following trade and other economic liberalization policies instituted since 1977, the export base remains fragile and narrowly concentrated on a small number of commodities. Not surprisingly, the GDP share of the manufacturing sector still remains below 20% as compared with 28% in Thailand, 26% in Korea, 30% in Malaysia and 21% in Indonesia.

Explaining Sri Lanka's Low Growth

20. What factors explain Sri Lanka's low productivity of investment, low domestic saving, low-income employment, weak agriculture performance, low flexibility of labor market, weak skills and poor overall export performance? As indicated by the results of the aggregative models, a search for answers must

lie in the underlying policy environment. We would discuss the policy framework under the following grouping--macroeconomic management, trade and industrial sector policies, financial sector policies, agriculture sector policies, and policies for improving the flexibility of the labor markets and quality of human capital.

21. **Macroeconomic management:** The adverse effects of inappropriate macroeconomic management for productivity and growth were indicated by the regression results in terms of the negative coefficients of the GDP share of government consumption and the black market premium variables. Indeed, maintaining a stable macroeconomic environment has been the Achilles Heel of Sri Lanka's economic management throughout the period. Fiscal deficits have generally been high for the entire period (see Graph 2). The balance of payments deficits were relatively low up to the late 1970s, but have expanded since 1979. To a large extent, these deficits in the balance of payments and fiscal account reflect the surge in concessional foreign aid since the late 1970s. Indeed, the rapid growth in these deficits in the 1978-83 period largely reflect the flow of foreign assistance to finance the expansion of the huge multi-purpose Mahaweli scheme. Nevertheless, large fiscal and balance of payments deficits, particularly fiscal deficits, have contributed to a rapid a growth in domestic and international indebtedness and a relatively high rate of inflation (see Table 10). The growth in international debt did not create any significant debt servicing problem partly because of the high concessionality of the debt flows. Large fiscal deficits, however, have emerged as a major source of concern. It has not only contributed to high inflation, domestic debt servicing obligations of the Treasury has generated some elements of dynamic instability. Thus, in 1992, debt service obligations (mostly of domestic origin) ate up almost 6% of GDP or a third of total tax revenues.

22. From a policy point of view, the main difficulty has been the inability to address the fiscal problem. A related issue is the role of external aid and its implications for domestic saving and real exchange rate management.

23. **Fiscal Policy:** Fiscal difficulties primarily reflect problems in managing government spending. Sri Lanka has made steady progress in raising tax revenues. Although there are problems of efficiency and equity in the tax structure, at about 20% of GDP, Sri Lanka's tax effort compares well with other developing countries at similar income levels. Efforts to mobilize non-tax revenues, however, have been limited by weak cost recovery policies for public services. So, total revenues have been about 21% of GDP. Regarding expenditure, despite recent attempts to control spending, government spending is still around 28-30% of GDP. As a result, fiscal deficits are still in the 7-9% range. Although the Government reduced the fiscal deficit substantially over the past decade or so--from 17% of GDP in 1980 to 7% in 1993--using both expenditure and revenue measures, government spending and deficits still remain higher than their sustainable levels. The unsustainability of the fiscal deficits is indicated by the continued deficit in the primary budget balance (see Graph 3) and the rising interest cost of the budget (see Graph 4)[1].

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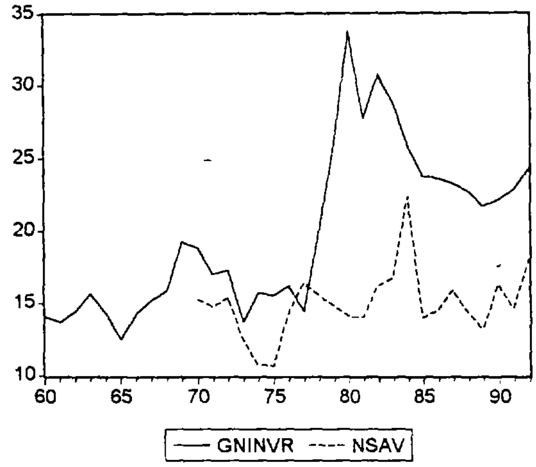
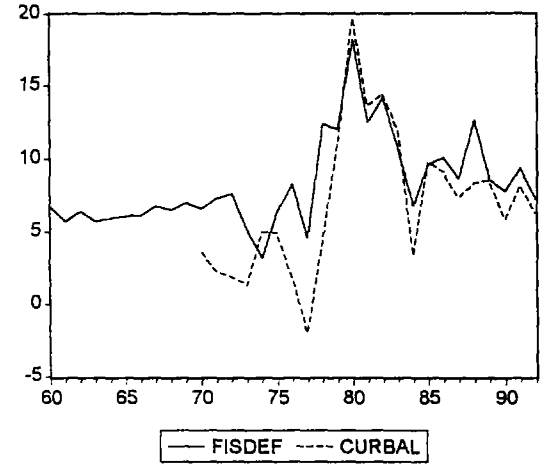
[1] A recent paper by Stern (1993) provides a quantitative analysis of Sri Lanka's fiscal unsustainability problem. However, unlike this paper, Stern argues strongly for a substantial increase in the tax revenue effort.

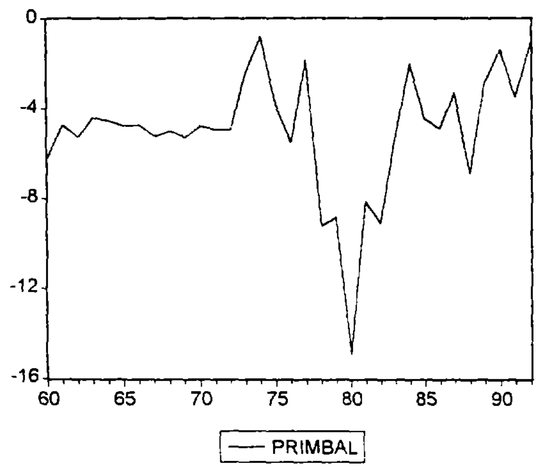
Graph 1: Sri Lanka Saving, Investment Balance (% of GDP p.a.)



Graph 2: Sri Lanka Trend in Current Account and Fiscal Deficits (% GDP p.a.)



Graph 3: Primary Budget Balance (% of GDP)



Graph 4: Sri Lanka Government Expenditure on Interest (% of GDP p.a.)

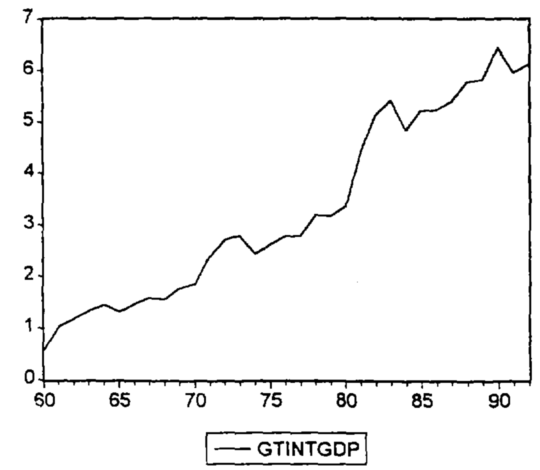


Table 10: Macrobalances in Sri Lanka and Comparators
(Average, % p.a.)

	1960-70	1970-80	1980-91	1960-91
A. Inflation (CPI)				
- Sri Lanka	2.9	8.7	12.2	7.9
- Korea	13.8	16.2	6.6	12.2
- Malaysia	1.0	5.9	4.2	3.7
- Thailand	2.3	9.7	4.5	5.5
- Indonesia	--	17.6	9.5	12.5 /b
B. Fiscal Deficit (% of GDP				
- Sri Lanka	-6.36	-8.38	-10.81	-8.34
- Korea	-0.50	-1.63	-1.05	-1.03
- Malaysia	-3.88	-6.41	-6.22	-5.75
- Thailand	-1.19	-3.13	-2.33	-2.20
- Indonesia	--	-2.60	-1.55	-2.10/b
C. Current Deficit (% of GDP)/a				
- Sri Lanka	-2.69	-3.22	-6.97	-4.05
- Korea	-3.03	-5.39	0.40	-2.56
- Malaysia	0.18	0.41	-3.00	-1.19
- Thailand	-1.32	-3.30	-4.40	-2.98
- Indonesia	--	-1.24	-2.55	-1.89/b
D. External Debt to GDP (%)/c				
- Sri Lanka	21.6	45.8	72.3	--
- Korea	38.9	47.0	16.2	--
- Malaysia	17.8	27.0	37.7	--
- Thailand	15.0	20.7	36.5	--
- Indonesia	41.4	18.1	43.6	--
E. External Debt to Export (%)/c				
- Sri Lanka	150.1	137.4	251.3	--
- Korea	186.1	130.6	47.1	--
- Malaysia	50.1	44.4	44.9	--
- Thailand	77.3	96.7	94.9	--
- Indonesia	220.2	94.2	231.2	--

/a Current account deficit defined as excluding official transfers.
/b Average over the 1970-91 period.
/c End of period.
/d For 1972.

Source: IFS and World Tables (various years).

24. A yet another problem associated with large fiscal deficits has been the prevalence of relatively high inflation (see Graph 5). This has happened despite frequent government interventions to moderate price increases of sensitive commodities. Fiscal deficits have fueled inflation by contributing to excess demand, working through the impact on money supply. The results of

regression analysis of the determinants of inflation are shown in Table 11.[2] Domestic variables--the stock of real money and real income--both have the right sign. The stock of beginning period real money is statistically significant at the 95% level indicating the role of excess money supply in explaining inflation. However, the income variable is not significant suggesting that Sri Lanka may not have benefitted from the dampening effect of income due to the relatively low and somewhat volatile pace of economic growth. On the external side, world inflation is a significant determinant of Sri Lanka inflation. Surprisingly, however, changes in nominal exchange rate failed to show any significant effect on inflation.[3]

Table 11: Sri Lanka: Determinants of Inflation--Regression Results (1970-92)

Variable	Constant	LRM2(-1)	LRGDP	WINF	CNEXR
Coefficient value	0.851	0.154	-0.144	0.0065	0.003
t - statistics	(0.83)	(2.27)	(-1.10)	(3.28)	(0.45)
Adjusted R^2 = 0.51		D.W. = 2.1		F-statistic = 6.69	

Notes: LRM2(-1) = Log of real money lagged one period.
LRGDP = Log of real GDP.
WINF = World inflation rate.
CNEXR = Rate of change of nominal exchange rate (depreciation of the exchange rate).

25. It can be argued that large fiscal and current account deficits are partly a reflection of the relatively large availability of foreign aid at concessional terms. The pattern of aid to GDP ratio is shown in Graph 6. On average, Sri Lanka has mobilized about 4% of GDP as foreign aid at a very low average interest rate (2% in nominal terms as per annum of 1992). Not surprisingly, despite rising external debt to GDP ratio, debt service ratio has continued to decline, partly due to the highly concessional nature of aid. As is well known, however, large inflow of foreign aid is not necessarily an unmixed blessing. Much depends upon the efficiency of use of foreign aid and the protection of the domestic economy from its potential adverse effects on national saving and the exchange rate management. What has been the effect of this large aid inflow on saving and exchange rate in Sri Lanka?

26. **Effect of foreign aid on private saving:** Empirical analysis of the saving function is shown in Table 12. Using private national saving rate as the dependent variable, the regressors included growth of GDP, population growth rate (to represent the role of demographic factors), a variable representing financial depth (deposit to GDP ratio) and the current account balance (to capture the impact of foreign saving). A dummy variable to capture the effect of the civil

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[2] The theoretical rationale underlying the inflation equation specification is that inflation is determined by imported inflation (world inflation and exchange rate changes) and domestic excess supply of money (determined by the gap between desired and actual real balances). See for example, Cyrus and Otani (1986).

[3] The results are generally consistent with those reported by Heytens (1994). One difference, however, is that Heytens reported a significant coefficient for the income variable.

war on external private capital flows is also added. All coefficients have the right sign. The coefficients of financial depth and the civil war dummy are significant at the 95% level. The coefficient of current account balance is significant at the 90% level. However, the coefficients of GDP and population growth variables are significant at only the 80% level. The results suggest that Sri Lanka could accelerate its saving rate by strengthening its financial sector and by ending the civil conflict. The surprisingly low significance of the growth rate probably reflects the uncertainties in economic prospects that has prevailed in Sri Lanka for a fairly long period. It is arguable that a higher sustained GDP growth will help raise the saving rate in the future. The significant negative relationship between foreign saving and private national saving suggests that there is some empirical evidence of a crowding out effect of foreign saving on domestic saving.

Table 12: Sri Lanka: Determinants of the Private Savings Rate-Regression Results (1970-92)

Variable	Constant	GGDP	GPOP	FINDEP	CURBAL	WARDUMMY
Coefficient value	6.50	0.319	-1.826	0.446	-0.199	-2.591
t - statistics	(1.50)	(1.35)	(-1.35)	(3.21)	(-1.87)	(-2.65)
Adjusted R^2 = 0.45		D.W. = 2.38		F = 4.58		

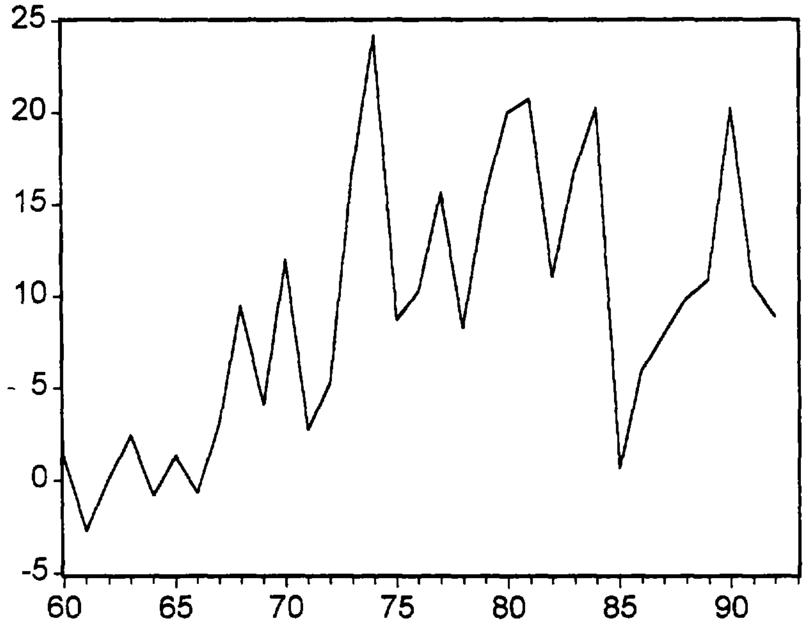
Notes:
GGDP = GDP growth rate.
GPOP = Population growth rate.
FINDEP = Measure of financial depth (Dep/GDP).
CURBAL = Current account balance--foreign savings rate.
WARDUMMY = Dummy to account for the effect of the civil war.

27. **Effect of foreign on the real exchange rate:** The movement in real exchange rate is illustrated in Graph 7. The real exchange rate is defined as rupees per unit of US dollar and adjusted for relative movements in US wholesale and Sri Lanka consumer prices.[4] So, an upward movement indicates real depreciation. The real exchange rate was roughly flat in the 1963-73 period and then showed a trend toward depreciation. The RER depreciated sharply in 1978, following the large devaluation of November 1977 by 76%. After this one time realignment, the RER has fluctuated mildly around a constant trend with a slight tendency towards appreciation. What factors explain the behavior of the RER? To answer this question empirically, the real exchange rate was regressed on the terms of trade (TOT), total government expenditure as a share of GDP (GEGDP), total capital flows (FCAP) and the share of total bank deposits to GDP (DEPGDP). The first three variables are standard determinants of the RER (see, for example, Edwards (1987) for justification). As indicated earlier, the variable deposits as a percentage of GDP is a proxy for measuring financial depth. The rationale for introducing this as a determinant of the RER is that financial deepening helps sustain real depreciation by containing aggregate demand and diverting household demand from non-tradeable assets to financial assets (See Athukorala and Rajapatirana (1993))

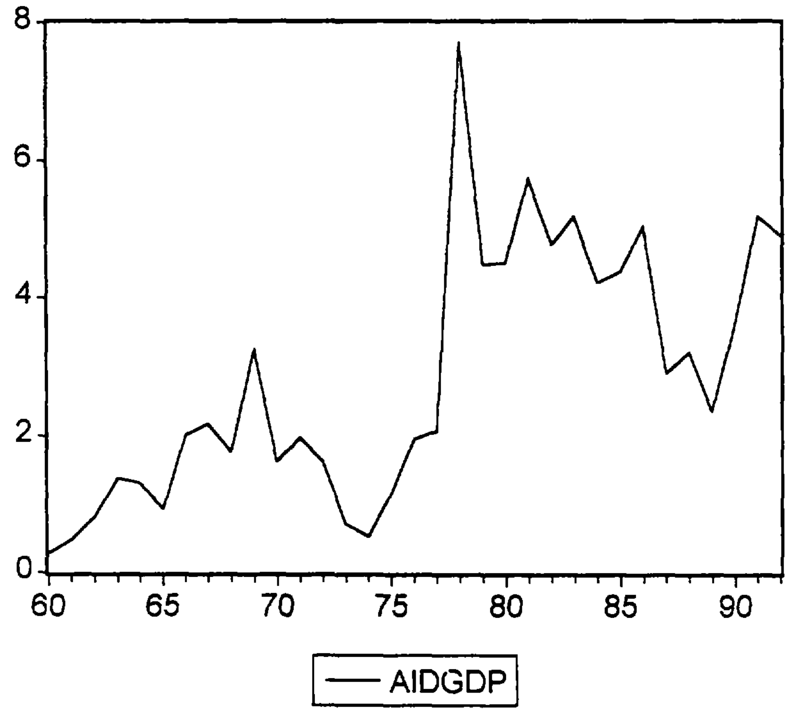
28. The results of the regression, expressed in logarithmic form and corrected for first-order autocorrelation, are shown in Table 13. The terms of trade variable turned out insignificant and was dropped. The net capital flows,

[4] For a justification of this definition of the RER, see Harberger (1988)

Graph 5: Sri Lanka Inflation Pattern



Graph 6: Sri Lanka Aid to GDP Ratio (% p.a.)



total government spending and financial depth variables all came up with the right sign and highly significant coefficient. Thus, while financial deepening has supported Sri Lanka's efforts to achieve a real depreciation, large capital inflows, especially official aid inflows, and associated large public spending have worked against this. Similar results are reported by Athukoral and Rajapatirana (1993) and White and Wignaraja (1992). These findings raise important concerns about the consistency of macroeconomic policy management in Sri Lanka.

Table 13: **Effects of Aid Flows on Real Exchange Rate in Sri Lanka--Regression Results (1970-92)**

Variable	Constant	LFCAP(-1)	LDEPGDP	LGEGDP(-1)
Coefficient value	4.19	-0.293	0.807	-0.069
t-statistics	(4.95)	(-3.23)	(3.27)	(-1.84)
Adjusted R^2 = 0.95	DW-statistics = 2.06		F-statistics = 86.92	

29. **Trade and Industrial Policies**[5]. Despite frequent changes in the trade and industrial policy regime, it is possible to broadly classify Sri Lanka's trade and industrial strategy in two distinct phases: a relatively inward-oriented, public investment led phase (1960-77) and a more outward-oriented private investment led period (1978-92). Not withstanding a brief phase of partial liberalization in 1965-69, Sri Lanka's trade and industrial policies in the 1960-77 period were generally geared towards the promotion of import substitution industrialization supported by public investment. Overall, the policy bias against exports was fairly prominent and the role of nationalized state enterprises was dominant. The main features of the trade and industrial policy regime were:

- licensing of industrial investment;
- intervention in labor markets;
- wide-ranging fiscal incentives to industries;
- nationalization of private enterprises, setting up of public manufacturing enterprises;
- exchange control regulations and a dual exchange rate system since 1965;
- highly differentiated tariff structure ranging from 10% to 300%;
- trade controls on both exports and imports; and

[5] The pattern of Sri Lanka's trade and industrialization policies and its impact on economic performance has been studied in varying depths by a number of authors. See for example Rajapatirana (1988), Yapa (1988) and Wickramsinghe (1992). The conclusions of these studies are generally consistent with the findings reported here.

o domestic price controls.

30. Apart from discouraging private investment in general, the main effect of these policies was to impart a significant anti-export bias. This was done both through an overvaluation of the real exchange rate as well as through large import protection--quantitative restrictions as well as tariff barriers. The resultant excess demand for foreign exchange was reflected in large premiums in the black market (see Graph 8). What was the impact of these policies on exports and the manufacturing sector performance? Table 14 shows the growth of total exports and value added in manufacturing. The manufacturing sector performed reasonably well during 1960-70, but the performance weakened substantially in the 1970-77 period. Thus, value added in manufacturing during 1970-77 grew by only 1% per annum, slower than growth of total GDP which also decelerated. As a result, the share of manufacturing in GDP declined from 16.7% in 1970 to 14.7% in 1977. Overall (1960-77), manufacturing value added expanded at around the same pace as total GDP (4% p.a.) during this import substitution phase causing the share of manufacturing to remain unchanged at around 15%. The performance of exports was very poor, growing by only 1.5% in 1960-70 and then moving to a declining phase during 1970-77. Perhaps the most important factor underlying the poor export performance in this phase was the rapid decline in the performance of the tea sector partly due to depressed world demand for tea but mainly due to nationalization. There was some attempt to boost manufactured exports through (i) the launching of the Foreign Exchange Entitlement Scheme (FEES) and a devaluation in 1967; (ii) allowing non-traditional exporters to retain 25% of their earnings; and (iii) establishing a export promotion Secretariat and a State Gem Corporation. The initial response to these incentives was very positive. The value of manufactured exports grew from less than US$5 million in 1970 to around US$90 million in 1977. Although the growth rate of manufactured exports was impressive, the small manufacturing base failed to make any notable impact either on the overall export performance or on manufacturing value-added. More importantly, the reduction in the overvaluation of the real exchange rate was not supported by trade and industrial deregulation reforms.

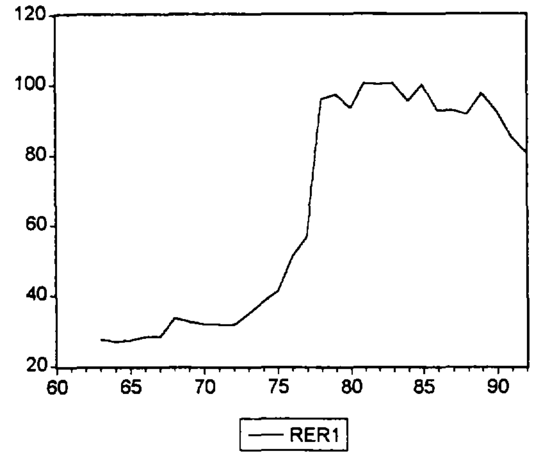
Table 14: Sri Lanka: Performance of Manufacturing Value-Added and Total Exports - 1960-92
(% p.a.)

	Inward-Orientation Phase			Outward-Orientation Phase		
	1960-70	1970-77	1960-77	1977-89	1989-92	1977-92
Growth of manufacturing value added	6.2	1.0	4.0	5.4	8.3	6.0
Share of manufacturing in GDP /a	16.7	14.7	--	16.8	18.5	--
Growth of total exports	1.5	-1.8	0.1	3.7	11.8	5.3
Share of manufacturing exports in total exports /a	2.2	11.4	--	54.7	64.4	--

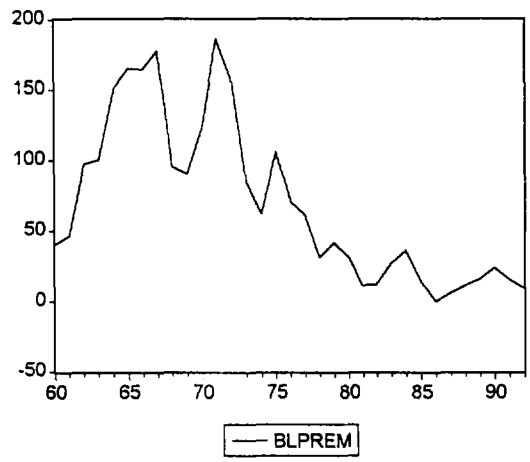
/a End of period; value added share in constant rupees terms; export share in current dollar terms.

Source: Central Bank of Sri Lanka, World Tables.

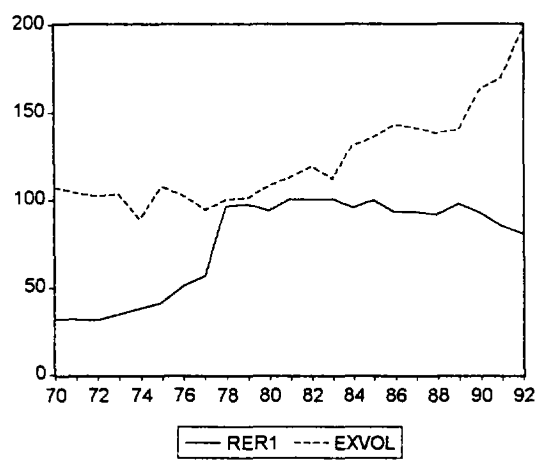
Graph 7: Sri Lanka Movement in real exchange rate
(rupees/US$ adjusted for inflation differential)



Graph 8: Sri Lanka Pattern of Black Market Premium
on Foreign Exchange (%)



Graph 9: Sri Lanka Movements in Export Volume
al Exchange Rate



31. The 1977-92 period witnessed a general move toward outward orientation and encouragement of private investment, despite the stop-go nature of reforms. The reforms were implemented in two phases: 1977-82 and 1989-92, with a relatively inactive period in between. The main characteristics of trade and industrial policies for the period as a whole were:

- encouragement of private domestic and foreign investment through substantial deregulation of investment licensing;

- significant reduction in quantitative restrictions and tariff barriers--the maximum nominal tariff has been successively reduced to about 50% in 1992;

- unification of the exchange rate along with substantial downward adjustment in November 1977 to correct for the overvaluation of the exchange rate and adoption of a policy of more flexible exchange rate management (crawling peg) since 1983;

- substantial liberalization of the exchange and payments system.

32. These policies substantially reduced the anti-export bias and boosted private and foreign investment. As a result, not withstanding the adverse effects of the civil war since 1983, the performance of the manufacturing sector improved noticeably (Table 14). Thus, manufactured value added expanded by 5.4% in 1978-89 and 8.3% in 1989-92. The stronger growth performance in 1989-92 reflects the effect of the renewed reform efforts that followed the policy slack during most of the 1980s. A similar pattern is reflected in the response of exports. In both, manufactured exports played a lead role. As a result, its share in total exports expanded from only 11% in 1977 to 55% in 1989 and to 64% in 1992. Also, deregulation of the exchange and payment system along with better availability of foreign exchange substantially reduced the black market exchange rate premium (see Graph 8).

33. The proper management of the exchange rate and its implications for exports has been a subject of debate in Sri Lanka. Despite improvements in exchange rate management, earlier we presented evidence supporting the aid-induced Dutch disease hypothesis. As well, we pointed out that similar results have been reported by a number of other studies. Yet, we have also observed a strong pick up in exports in the 1978-92 period. How does one reconcile these apparent contradictory outcomes? Graph 9 plots the movement in export volume and the real exchange rate. Exports were roughly flat during the 1970-77 period, even though the RER depreciated somewhat for the period as a whole. Exports then took off since 1978. The growth of exports has been particularly rapid since 1989. The RER did depreciate rapidly in 1978 but has shown a mild tendency toward appreciation since then. Peculiarly, exports and RER seem to move in opposite direction. What factors then explain the rapid growth of exports in the 1980s?

34. The determinants of exports are shown in Table 15. The volume of exports was regressed on the real exchange rate (RER), world income (WINCOM) and a domestic supply side variable--deviation of GDP from trend (QT).[6] The regression is run in logarithmic form. World income and domestic supply are both significant determinant of Sri Lanka's exports. The RER variable, however, yields a perverse result showing up with a significant negative coefficient. This peculiar result can be rationalized as follows. In the 1970s the overall environment for exports was depressed by weak and inward-looking domestic policies, reflected in below trend GDP growth, and relatively sluggish world demand for Sri Lanka's exports. The environment for exports improved noticeably

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[6] See Bond (1987) for theoretical justification for this reduced form.

after 1977, starting with a substantial real depreciation in November 1977, a pick up in world demand for Sri Lanka's exports, and more supportive domestic policies in terms of trade and financial sector liberalization which is reflected in above trend expansion in domestic output in the 1978-82 and 1990-92 periods. So, exports gained momentum even though the RER has shown a tendency toward appreciation. Nevertheless, the appreciation of the RER remains a cause for concern. A continued tendency towards appreciation will sooner or later begin to hurt exports. A careful monitoring of the RER trend will be necessary to ensure its consistency with export development.

Table 15: Sri Lanka: Relationship Between Exports and Real Exchange Rate --Regression Results, 1970-92

Variable	Constant	LRER	LWINCOM	LQT
Coefficient value	-2.465	-0.321	1.641	-2.127
t-statistics	(-4.447)	(-5.616)	(11.646)	(4.137)
Adjusted R^2 = 0.90	DW-statistics = 1.73		F-statistics = 64.19	

Financial Sector Policies

35. Before 1977, Sri Lanka followed a policy of financial repression with negative or very low real rates of interest. Government intervention in the allocation of credit and determination of interest rates was pervasive. In 1961 the Bank of Ceylon, the only indigenous commercial bank, was nationalized. As well, the state-owned People's Bank was established to meet the financial needs of the rural economy. Under the Finance Act No. 65 of 1961, Sri Lankans were prohibited from opening new accounts in foreign banks or increasing their deposits. Also, foreign banks were prohibited from opening new branches. In 1963, the Central Bank was empowered to provide long and medium-term finance to institutions engaged in the provision of credit for productive purposes. Credit ceiling and selective credit controls were used as instruments to channel credit in line with the priorities of the Government's economic policy. The dominance of the two government-owned banks in the banking system greatly facilitated the implementation of these preferential credit policies.

36. What has been the impact of financial repression on growth? As noted in Section III above, international evidence including the evidence from the East Asian economies is mixed. However, while the effects of mild, periodic financial repression on growth is ambiguous, there is adequate evidence that large negative interest rates cannot be sustained and would eventually lead to reduced growth. Furthermore, the inefficiencies resulting from credit rationing and weak financial intermediation can be expected to have reduced growth.

37. Since 1977, Sri Lanka has made some progress in reforming the financial sector. Interest rate controls have been eased, foreign banks have been allowed to set up branches and commercial banks are allowed to operate foreign currency banking unit (FCBU) to develop offshore banking facilities in Sri Lanka. The response to these measures has been positive. In a recent study, Athukorala and Rajapatirana (1993) conclude that the financial sector reforms since 1977 have boosted private investment by increasing the availability of financial resources and have also helped to contain the appreciation of the RER by diverting demand from non-tradeables to financial assets. Nevertheless, despite greater financial

deepening, deposit to GDP ratio and private credit to GDP still remain much below that in Korea, Malaysia, Thailand and Indonesia (see Table 16). The gap between average real lending and borrowing rates is too large, suggesting room for efficiency improvement. Nominal and real lending rates have also become needlessly high in view of high and variable inflation and resultant uncertainties about price stability. A part of the problem is the continued dominance of the two state-owned banks in the financial sector, suggesting the scope for further deregulation. There are also serious efficiency problems in these banks, which partly explain the large intermediation margins. Finally, interest rate management has been complicated by the recent surge in capital inflows and the attempt to sterilize the monetary impact of these inflows.

Table 16: Measures of Financial Depth in Sri Lanka and Comparators /a

	1972		1980		1985		1990		1992	
	D	PC	D	PC	D	PC	D	PC	D	PC
Sri Lanka	17.7	13.9	25.2	25.4	24.4	24.0	21.3	19.6	24.2	22.2
Korea	30.2	35.1	28.1	42.3	33.5	53.7	35.9	59.0	37.9	58.9
Malaysia	39.7	21.1	40.2	38.3	53.9	61.7	57.1	72.2	--	--
Thailand	25.9	19.5	31.2	30.6	54.3	49.5	78.2	79.3	--	--
Indonesia	--	--	12.0	9.5	18.1	18.2	38.2	50.2	47.6	55.0

/a D = total bank deposits; PC = private sector credit.

Source: International Financial Statistics (IMF).

Agricultural Sector Policies

38. An important reason for the relatively slower economic growth in Sri Lanka is the weak performance of the agriculture sector. As noted earlier (Table 8) the average growth rate of agriculture has been generally below that in Malaysia, Thailand and Indonesia. The performance has been particularly weak in the 1980s where this fell significantly short of even the South Asian regional average (2.1% p.a.)(3.4% p.a.). Various factors contributed to the success of agriculture in the East Asian economies, notable among them being: land reforms, agricultural extension and services, reasonably good infrastructure and heavy investment in the rural areas. As well, the low levels of direct and indirect taxation on agriculture in East Asia played a crucial role.

39. Why has the agriculture sector's performance been generally weak? And, what explains why agriculture's overall performance did not improve in the 1980s, especially as other sectors seem to have done better after the deregulation policies of the post 1977 period? Let us start with the first question. Bhalla and Lahiri (1986) have argued that in general policies were biased against agriculture. Thus, as a result of pricing policies, resources were transferred out of agriculture. Within agriculture, policies favored paddy production. Indeed, achievement of rice self-sufficiency seems to have been a major national objective without regards to its opportunity cost. The attention to paddy has meant liberal investment in irrigation and making this water available at virtually free of cost, fertilizer subsidies, subsidized farm loans for rice farmers, and price and trade controls that have reduced incentives for other farm outputs. The impact of these policies has been that while paddy production expanded noticeably, yields began to decline as paddy farming moved into areas that were not suitable for growing rice. Not surprisingly, despite the emphasis place on paddy, the expansion of value added from paddy has not shown much dynamism (see Table 17). Overall, the performance of other crops has been strong in terms of growth in value-added. But this expansion has come from good

response from a few inefficient crops that were heavily protected (chillies, onions, potatoes). The performance of other more efficient and high value added products (fruits, flowers, gherkins) has been constrained by trade policy distortions and other constraints.

40. Regarding tree crops, in the 1950s and the 1960s, they played a major role in terms of supply of foreign exchange, value-added and employment. The performance of tree crops deteriorated severely in the 1970s, reflecting the impact of nationalization and subsequent mismanagement of large estates as well as the worsening of the incentives [see World Bank (1993)]. Nationalization of the estates led to big losses in productivity because the Government had neither the knowledge nor the experience to run plantations. As well, the Government levied heavy export duties on tree crops, and, starting in 1967, initiated a system of dual exchange rate applicable to the traditional export crops. Furthermore, the Government's continuous intervention in the labor market increased wages and benefits and drove up production costs for the estates without any productivity increase.

Table 17: Sri Lanka Agriculture Sector Composition and Performance

	1960-70	1970-77	1977-92	1960-92
- Growth of Agriculture (% p.a.)				
- Sectoral value-added	3.7	2.3	2.6	2.9
: tree crops	N.A.	1.8	-0.1	N.A.
: paddy	N.A.	0.1	2.2	N.A.
: other crops	N.A.	6.4	4.2	N.A.
- Share of Sectoral VA[a/]				
: tree crops	35.1	26.5	23.5	-
: rice	28.0	24.8	23.2	-
: other crops	36.9	48.7	53.3	-

Source: Central Bank of Sri Lanka

a/ End of period in constant prices.

41. The answer to the second question--a seemingly puzzle--lies in that the liberalization policies in the post-1977 period did not attempt to address the constraints in the agriculture sector. Although the overall negative protection of agriculture was reduced through lower trade taxes and a correction of the exchange rate overvaluation, most of the serious distortions remained. Thus, trade and pricing policy interventions have continued to be pervasive. Factor market distortions in regard to land and credit markets are substantial, particularly the absence of a well-functioning land market. On top, support services such as agriculture research and extension are inadequate and the efficiency of water use is low. As a result, yields are low, the cropping pattern is inefficient and costs are high.

42. The poor performance of the publicly-owned plantations has been a matter of concern for the Government for sometimes but serious efforts to improve the situation did not start until mid-1992. Thus, in June 1992 the Government reorganized the plantations into 22 public companies and contracted out their management to private firms on a profit sharing basis. The contracts were given

for a period of five years with possibility for renewal depending upon performance. Export taxes on plantations were also eliminated. Although these reforms proved beneficial, they were not adequate. Without ownership and given the short duration of the contracts, the incentives for private equity participation in the state-owned plantations remain weak. Also continued Government intervention in wage setting and employment has severely constrained efficiency. As a result, improvements in the performance are marginal.

Policies Affecting Labor Market and Quality of Labor

43. One important characteristic of the East Asian experience is the prevalence of a flexible labor market (see The East Asian Miracle Study (1993)). Unlike in many developing countries including Sri Lanka, governments in these countries did not intervene seriously to distort the working of the labor market either through wage or employment regulations. Employment and remuneration decisions were largely demand driven. A rapid pace of economic growth, including in agriculture, supported the growth of employment and incomes. In contrast to this, the labor market in Sri Lanka has not functioned as effectively.

44. Broadly speaking, Sri Lanka's labor market could be grouped into two segments: a regulated segment with an estimated third of total employment and an unregulated segment involving the remainder.[7] The regulated segment comprises of workers in the state-owned plantations (7% of total employment), civil servants (12% of total employment) and employees of large private firms and state corporations (15% of total employment). The state-owned plantations is segregated from the rest of the labor market with virtually no labor mobility. Both employment and wage decisions are regulated here, resulting in low unemployment as well as high wages relative to productivity. Similarly there is both excess employment (especially school teachers), as well as higher remuneration than in the private sector for given levels of skill or education, in the civil service and state corporations. Wages of private firms in the regulated market are subject to minimum wages while employment flexibility is constrained by the Termination of Employment of Workmen Act (TWA). The remaining 67% of total employment includes agriculture, informal services in urban and rural areas and small private enterprises in the urban areas. Employment in the unregulated segment works flexibly, responding generally to the market mechanism.

45. These characteristics of the labor market have contributed to large open unemployment in the following way : wages are high relative to productivity in the regulated sector resulting in excess supply of labor in this segment. While labor market in the unregulated segment works generally flexibly, it does not fully clear the excess supply in the regulated market because potential employees would rather wait and seek a job in the high-paid regulated segment than get absorbed in the low paid (and possibly low prestige) job in the unregulated market. The private cost of this wait period is low because families are willing to provide this support. In a recent study, Rama (1994) has provided some empirically evidence which supports this hypothesis. The main point is that non-market interventions have limited the flexibility of Sri Lanka's labor market in the organized sector which accounts for a much larger share of domestic value-added than indicated by its employment share.

46. Sri Lanka's labor market distortions are compounded by the relatively low quality of skills, notwithstanding its strong commitment and progress with human development. This partly relates to the weak quality of general education, but also reflects problems with labor training. These issues have been analyzed in detail in a recent World Bank study (1994) and only the main issues are summarized here.

Recent studies of Sri Lanka's labor market include Patricia Alailima (1992) and Martin Rama (1994).

47. In the area of general education, concerns with the low quality reflect the interaction of a number of factors. First, as result of excessive number of teachers, much of the public spending on education is concentrated on teacher salaries, leaving little resources for purchasing essential materials and supplies. Second, as a result of deemphasis of English language and not adequate emphasis on science, school graduates are unable to respond to market demand for skills. Third, there are also concerns about the low quality and motivation of teachers. Regarding vocational training, the main difficulty is the poor link between the publicly owned training institutes and employers. As a result, there is a mismatch between what the employers need and what the training institutes produce. The prevalence of the TWA (termination of workers act) also works as a deterrent to the supply of inhouse long-term training by employers. The employers fear that once they accept a trainee they may be stuck with the person because the TWA makes it very hard to retrench workers.

V. Implications for the Future Growth Strategy

48. The analysis of the previous two sections is quite revealing. Sri Lanka's weaker growth performance relative to the East Asian countries can be explained by differences in the policy framework. Like the East Asian economies, Sri Lanka put a lot of emphasis on human development and equitable distribution of income. These policies did pay off handsomely in terms of strong human development and reduction in consumption poverty. But Sri Lanka was unable to fully exploit its good human capital base to grow as rapidly as the high-performing East Asian economies. There are a number of reasons for this. Thus as compared with the East Asian economies, Sri Lanka's overall investment rate and its productivity has been lower; the domestic saving rate was very low; the performance of agriculture has been weak; and exports performance has on average been less impressive. These reflect the effects of policy weaknesses in a number of critical areas: weak macroeconomic management reflected in relatively higher fiscal and balance of payments deficit and higher inflation; weak public expenditure management; mixed performance on exchange rate management, with periods of substantial overvaluation; a long period of trade protection, followed by trade liberalization on a rather selective basis (agriculture incentives remain distorted); financial sector policies that continue to hamper efficient financial intermediation despite some recent improvements; agriculture policies that have been least reformed over the past 30 years and continue to constrain agriculture performance; and relatively low flexibility of labor market. Even in the area of human development, there are concerns relating to the quality of the labor force.

49. The implications for future policy reforms are obvious. These are summarized below.

Macroeconomic Adjustment

(a) A major challenge for Sri Lanka in the coming years will be to squarely address its macroeconomic imbalances. The fiscal deficit is unsustainably large. Sri Lanka cannot continue to run a deficit in its primary budget balance for any substantial period in the future without running into a financial crisis. So, Stern (1994) has correctly argued the need to convert the primary deficit into a small surplus to maintain internal balance. The magnitude of the fiscal effort is in the range of 4-5% of GDP. This reduction in the fiscal deficit will need to come mostly from a reduction in the level of public spending. As noted, earlier, the tax effort in Sri Lanka is quite good. Although the total revenues can be increased by an additional percentage of GDP or so through improvements in cost recovery of public services, some three percentage point of GDP will need to come from expenditure rationalization.

(b) The scope for expenditure rationalization in the immediate short-term may be somewhat constrained, but over the medium-term it is substantial. Priorities include cutting defense expenditure through a resolution of the civil conflict; rationalizing public administration including the pensions system; eliminating the budgetary burden of public enterprises through faster implementation of the Government's privatization program, and increasing efficiency and cost recovery in enterprises that will remain in the public sector. Reduction of fiscal deficit will also reduce expenditure on interest payments, which is currently a source of the instability problem.

(c) Lower fiscal deficit will help reduce inflation through reduction in excess demand resulting from excess money supply. In recent years, Sri Lanka has moved toward a more open economy in areas of both trade and finance. The monetary implications of the resultant capital flows has become a major headache for monetary management. Although the available evidence on whether an independent monetary policy can at all be pursued in Sri Lanka in today's open economy environment is unclear, it is obvious that a coordinated fiscal and monetary policy is critical for reducing inflation and managing the interest rate policy. Recent experiments with sterilization policy in Sri Lanka have demonstrated the difficulties of relying excessively on monetary policy instruments. Reduction in excess domestic liquidity will require a strong fiscal adjustment.

(d) The management of exchange rate improved considerably in the 1980s, with the unification of the exchange rate and the move to a crawling peg adjustment mechanism. But a combination of large government spending and large capital flows, especially official aid, has generated pressure on the real exchange rate (RER) to appreciate. There is a substantial risk that continued RER appreciations will hurt exports, so a vigilance on RER movements is needed to avoid this risk. A reduction in government spending and lower fiscal deficits will again help. Careful management of foreign aid and private capital flows will be necessary to avoid large demand pressure in the non-traded sector. Financial deepening through further financial sector deregulation will also assist in avoiding an appreciation of the RER.

Trade and Industrial Policies

50. The reform of trade and other policies designed to promote industrial development has been the subject of debate in Sri Lanka and outside. Supporters of government intervention argue that many of the East Asian economies have used trade, fiscal and financial instruments selectively to promote specific industries (see for example, Wignaraja and Kelegama (1991) and Abeyratne(1989). As noted in the East Asia Miracle Study (1993), while this indeed has been the case the favorable results cannot be expected to be automatic. Governments of Japan, Korea, Taiwan and China selectively promoted capital-and knowledge-intensive industries, they also took steps to ensure that they were promoting profitable, internationally competitive firms. Moreover, their industrial policies incorporated a large amount of market information and used performance, usually export performance, as a yardstick. There are many counter examples where efforts to promote specific industries did not work (e.g., Brazil, India) because of inability to apply the market test of profitability and competition. Sri Lanka's own experience with trade protection has shown the pitfalls of relying on government intervention for industrial development. On the other hand, the positive response to liberalization policies in the 1989-93 period suggest the potential benefits of further liberalization. So, it would seem that Sri Lanka's development objectives would be better served through reliance on neutral incentives. The reforms suggested below are based on this premise.

(a) Notwithstanding good progress in liberalizing trade policies, there is substantial scope for further reducing the bias against exports induced by the trade policy regime. While many of the quantitative restrictions have been eliminated, a number of restrictions affecting particularly agriculture remain in place. Moreover, a combination of specific duties, surcharges, exemptions and waivers has resulted in a fairly complex tariff regime. These have continued to impart a bias against exports and generally reduce investment efficiency. Future trade policy reforms should concentrate on eliminating most quantitative restrictions, further reducing tariff protection and simplifying the tariff structure. To ensure proper implementation of these reforms, a reform of the customs department may also be needed. Options here include use of external assessment firms (such as the SGS) for preshipment inspection. Other countries, such as Indonesia, have successfully used this option to minimize leakages and abuse.

(b) Sri Lanka continues to rely on a number of fiscal incentives (tax holidays and import duty exemptions) to promote private investment, especially in the manufacturing sector. Particularly, since 1990, Sri Lanka has offered generous tax incentives to promote foreign investment and exports. A number of recent studies have shown the problems with the use of these fiscal incentives in Sri Lanka [World Bank (1994); FIAS (1992)]. First, since tax holidays are granted on a case by case basis, they are difficult to monitor for fraud and evasion. Second, firm level survey results suggest that many firms obtain tax holidays to subsidize investment that they would have made even without the incentive. Third, potential foreign investors regard country risk and labor cost adjusted for productivity as more relevant factors than fiscal incentives. Finally, the recent policy to use tax incentives to encourage garment firms to locate in remote areas with inadequate infrastructure has generated serious efficiency problems. Overall, these incentives distorted resource allocation and contributed to macroeconomic imbalance by reducing budgetary revenues. In light of these problems, a better policy option would be to replace tax holidays with: (i) a low flat corporate rate of taxation consistent with international standards; and (ii) limited use on investment tax credit aimed at new investments which are consistent with Sri Lanka's long-term development needs.

(c) Sri Lanka has come a long way in deregulating its investment licensing regulations. However, a number of regulatory restrictions in the area of employment, exit and bankruptcy procedures continue to impede investment in manufacturing and services. Along with efforts to eliminate distortions in the labor market (see below) the Companies Act and the Bankruptcy Law needs to be simplified and made more flexible to facilitate winding up of business when needed.

(d) A notable feature of the East Asia experience is good communication between the government and business which contributed to the development of a business-friendly environment [see The East Asian Miracle (1993)]. In addition to a generally favorable business environment, formal mechanisms were established in a number of countries to have regular consultation between government and business on relevant policies. The focus was on improving competition and sharing information, rather than collusive behavior for rent seeking. Similar consultative arrangement between private sector and the Sri Lankan government might be very useful in disseminating information, developing right policies and building consensus, and proper implementation of policies.

Financial Sector Policies

51. Greater financial deepening will need to be a key objective of financial sector reform. This will require reforms aimed at increasing financial intermediation activities and improving the efficiency of financial intermediation on both demand and supply side. Sri Lanka has moved well in deregulating interest rates. The main constraint that remains is the dominance of inefficient, state-owned banks. Despite poor financial performance, these banks have continued to dominate the financial sector because of various government support including privileged access to deposit sources. The resultant lack of competitive pressure has reduced both the level and quality of financial intermediation. Quality has suffered due to two reasons. First, they have been used as instruments of government policy to direct credit to politically determined beneficiaries, often without regard to financial or economic viability. Second, these banks have played the role of market-makers in determining domestic lending rates. Consequently, while inefficiency resulting from over-staffing and bad portfolio has raised the cost of doing business, the effect of these inefficiencies have often been passed on the borrowers in terms of higher loan rates. As a result the spread between average deposit and lending rate has been very high.

(a) Recent steps to increase competition has included efforts to legislate a banking reform act that would provide greater autonomy to the state-owned banks and place the private commercial banks on the same footing as the two state-owned banks. A speedy implementation of this measure will be an important first step. Nevertheless, this by itself will not be adequate. The main policy change that is needed to enhance the dynamism of the financial sector is to privatize the two state banks.

(b) Along with this key reform, steps will also need to be taken to strengthen supervision capacity of the Central Bank to ensure the soundness of the banking sector in a more competitive environment.

(c) Sri Lanka's small but growing capital market has shown dynamism in recent years as direct foreign investment has been growing in response to the various deregulation measures. Nevertheless, the state's control over the use of insurance and pensions fund has tended to reduce the effectiveness of the capital market. Not surprisingly, most of resources mobilized in these institutions have been channelled toward the purchase of T-bills to reduce the cost of the budget deficit. The privatization of insurance companies has been under consideration for sometimes as a way of increasing competition and efficiency in insurance. Implementation of this reform will also benefit capital market development by allowing more flexible use of insurance funds. Similarly, an independently managed public pensions fund is also likely to help the capital market as investment decisions are likely to be guided by profitability considerations rather than dictated by the need to finance the budget deficit at lower cost (i.e., purchase of T-bills).

Agriculture Sector Policies

52. In the plantation sector, the main challenge is to privatize the plantations and eliminate government involvement in wage setting. In the non-plantation agriculture, reform of trade policies are essential to promote diversification and growth. In addition, reforms are needed in a number of areas, land reforms, marketing reforms, better use of water resources and more effective research and extension services. These points are developed in some more detail below.

(a) It is clear from the experience of the reform efforts of the past two years that privatization of the plantations is the key to their renewed profitability. Given political sensitivity, the implementation can be phased over through a system of long-term management contracts (50 years or more) and gradual sale of assets in the form of shares. At the same time, the Government should remove all remaining restrictions on marketing, refrain from involvement in wage setting and restructure research institutes to allow greater private sector involvement.

(b) The most important trade policy issue affecting agriculture concerns the control of rice trade. There are also restrictions on import of wheat, potatoes, chillies and onions. Except in the case of wheat, the main aim of trade controls has been to protect farmer incentives. As noted earlier, the impact of these policies has been a fairly distorted production pattern. As in the case of the manufacturing sector, neutral incentives would probably be better for agriculture performance than guiding specific production activities through trade protection. Even in agriculture, a small economy like Sri Lanka will likely benefit more from opening up to trade. Reconciling the objectives of food security and protection of farmer income with production efficiency considerations could involve some trade-offs, but these can be made consistent with outward orientation. Thus, while lower trade protection for rice, onions, potatoes and chillies could hurt producers in the short-term, the medium-term gains from diversification toward other, more efficient crops would likely improve total income from agriculture. In addition, rice and other farmers facing lower protection need not lose if better support services are provided to enable improvements in productivity.

(c) Changes in trade policy alone will not lead to successful diversification in agriculture. A major constraint that needs to be addressed as well is the lack of a well-functioning land market due to the state's role as the dominant landlord, restrictions on land sale and use, and inadequate land registry. The Government has been working on a legislation to facilitate land titling and to speedily resolve land disputes. This effort should be translated into action as soon as possible. In addition, the following measures need to be considered: (i) for new settlers in colonization schemes, give outright grants without any subsequent restrictions on use and transferability of the land; (ii) for existing settlers, convert all permits to land grants as soon as possible and eliminate restrictions on land use and transfers; (ii) properly disseminate the rulings of the Agrarian Services Amendment Act of 1991, by which all restrictions on land use were removed; and (iv) prepare a program to divest to the private sector all government-owned land presently devoted to agriculture.

(d) While making land and product markets work better is essential, the availability of efficient support services is also necessary to boost value-added in agriculture. The main needs are (i) make more efficient use of irrigation water through better O&M, supported by cost recovery and farmer involvement in canal maintenance; (ii) strengthen research and extension by allocating more budgetary resources, greater outreach effort to disseminate research findings, involving users in determining the research agenda, and using private sector research facilities; (iii) make a careful review of rural infrastructure needs, particularly rural roads, and support priority needs through public expenditures; (iv) a careful review of rural financing services is needed; based on this review there may be a need to support the development of rural financing institutions. The nature of this support should be based on lessons of experience from other countries (e.g. the Grameen Bank in Bangladesh, the Kuppedes in Indonesia).

Enhancing the Flexibility of Labor Markets and Labor Quality

53. Policies for enhancing the flexibility of labor market and quality of labor would be essential to support higher growth. Regarding labor market, the main aim of policy reform should be to remove the distortions that constrain the flexibility of labor market in both the public sector and the large enterprises in the private sector. Admittedly, reforms here will present a major implementation challenge in view of political sensitivities. While this calls for a sensitive handling of the underlying reforms, failure to implement the reforms might constrain Sri Lanka's ability to attain the NICs status. Policies for labor quality enhancement would need to address the concerns in both general education and vocational training.

(a) In the public sector, policy challenges for improving the flexibility of labor market involves the following: (i) remove government involvement in wage and employment decisions in the plantations and other public corporations, and let these be based on profitability considerations; (ii) rationalize civil service hiring on the basis of needs rather than political expediency; and (iii) align wage adjustments to reflect productivity and budgetary prudence.

(b) In the private sector, the main task needed to increase labor market flexibility is to remove the TWA.

54. Regarding labor quality, policies would need to address concerns in both general education and vocational training. The main reforms include:

(a) There is a need to improve the composition of public spending on primary and secondary education. As noted, at present most resources go to finance teacher salaries, leaving very little for materials and supplies. Teachers are generally in excess supply in the cities. So a reduction in the number of teachers in the cities will reduce the salary bill and release resources for essential school supplies and materials.

(b) Greater emphasis on science and English as a second language will improve the ability of students to respond better to the needs of the job market. More generally, a careful review of the curriculum and appropriate revisions in light of Sri Lanka's development needs and market demand will help improve the quality of human capital.

(c) Efforts to enhance the quality of trainers--the teachers--are also needed.

(d) Sri Lanka needs to rethink its skill development program. International evidence shows that training programs are most likely to succeed when sponsored and or implemented in collaboration with prospective employers. There are various ways how Sri Lanka could reorganize its training programs to make it demand based. The main need is to ensure a strong involvement of the private sector (employers) in the design and implementation of the training programs.

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